



WINTER WEATHER

TEN TIPS TO MINIMIZE FREEZE RELATED LOSSES TO BUSINESS

Businesses affected by holiday/weekend shutdowns during cold weather, and those with building heat generated by process equipment can benefit from the following ten tips.

- ❖ Gather extra supplies such as tarpaulins for use as windbreakers, steam hoses for thawing frozen lines, space heaters for keeping repair crew warm or to keep instruments from freezing, antifreeze supplies for cooling systems, and warm clothing for maintenance and operating crews.
- ❖ Provide unattended facilities with a central station-supervised alarm system to monitor power supply, building temperatures, low-water fuel trips on boilers, water temperatures on exposed water storage tanks and process controls.
- ❖ Maintain all building areas above 40 degrees Fahrenheit. Check heating equipment to make sure it can keep the building warm enough through an extended cold period.
- ❖ Monitor temperatures every few hours in hard-to-heat areas.
- ❖ Make sure the building shell is in solid condition; close unnecessary openings; make sure the structure will not lose heat or allow extremely cold wind to enter.
- ❖ Check heat-tracing systems. Drain unprotected water-cooled equipment and condensed moisture from compressed air lines.
- ❖ Be ready, if you facility loses heat, to drain equipment and initiate emergency response procedures for processes that depend on a steam or water supply.
- ❖ Take special care if fire protection pipes freeze. Contact your local fire department and insurance company immediately. Avoid open flames.
- ❖ Check wet and dry-pipe sprinkler systems regularly, and check water temperature of fire pumps' suction tanks daily.
- ❖ Construct wind breaks to protect open piping and instruments from the cold. Do not drain automatic sprinkler systems, except as a last resort. If automatic sprinkler systems are drained, be sure to advise your local fire department and insurance company that the systems are out of service.
- ❖ Snow Preparedness Starts Early
- ❖ The weight of snow can collapse a roof in seconds. Metal buildings and inadequately designed or constructed roofs are at greatest risk. Snow-related prevention measures require extra precautions. To avoid the nightmare of roof collapse, cleanup and recovery, follow these ten simple precautions.

- ❖ Inspect the roof framework for weakness before snow falls. Assess the roof's ability to sustain heavy amounts of snow.
- ❖ Review your winter emergency-response plan. Make sure it includes monitoring snow depths and proper snow removal training.
- ❖ Maintain equipment - Keep shovels, snow blowers and other snow removal equipment in ready condition.
- ❖ Inspect drains regularly. Remove any debris that may prevent water flow. Clear downspouts of snow or ice at their outlets.
- ❖ Clear drains of snow and ice following a snowstorm to allow melting and runoff.
- ❖ Clear paths on pitched roofs - On pitched roofs without drains, open paths to the eaves to ensure drainage.
- ❖ Watch for ponding - As snow compresses and absorbs rain, increased weight on the roof can create depressions that will not drain. Without drainage, ponding can grow worse as winter progresses.
- ❖ Be sure roof areas are proven to be structurally safe before removing snow from them.
- ❖ Avoid damaging the roof when removing snow with a snow blower. Raise the blades of the snow blower high enough to avoid contact with the roof.
- ❖ Remove snow from the roof in increments - do not wait until collapse is imminent. This is critical in roof areas where snowdrift can occur like valleys formed by gable or peaked roofs, or at areas where adjoining roofs are at different elevations.

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